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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of   :   William J. Semper, et al.

Serial No.   :   10/620,402

Filed   :   July 16, 2003

For   :   SYSTEM AND METHOD FOR CONTROLLING QUALITY
                                       OF SERVICE IN A WIRELESS NETWORK

Art Unit   :   2617

Examiner   :   Michael T. Vu

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicant requests review of the final rejection in the above-identified application. No

amendments are being filed with this request.

This request is being filed with a notice of appeal. The review is requested for the reason(s)

stated in the arguments below, demonstrating the clear legal and factual deficiency of the rejections of

some or all claims.

Claims 1-21 were rejected as obvious over U.S. Patent Application Publication

No. 2003/0095527 to *Shanbhag*. (hereinafter, simply "Shanbhag") in view of U.S. Patent No.

6,711,414 to *Rinne*, (hereinafter, simply "Rinne"). The rejections are legally and factually deficient.

For the convenience of the panel, claim 1 is reproduced below:

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1.   (Original)   For use in a wireless network, a method of providing quality-of-service (QoS) functions to a mobile station accessing the wireless network, the method comprising the steps of:

receiving from the mobile station a packet data call initiation signal;

sending an authorization request corresponding to the mobile station;

receiving an authorization message and quality-of-service profile corresponding to the mobile station;

receiving application information corresponding to the mobile station; and

determining quality-of-service parameters according to the quality-of-service profile and the application information, wherein the mobile station thereafter communicates according to the quality-of-service parameters.

Claim 1 requires, among other limitations, receiving a quality-of-service profile corresponding to a mobile station. This limitation is not taught or suggested by the art of record. The Examiner alleges that this is taught by Rinne at col. 1, line 43 – col. 4, line 67. The Examiner still cites to huge portions of a cited reference without describing exactly on what he relies, and there appears to be no such teaching in that reference.

Rinne teaches that "The quality of service (QoS) is defined by a group of QoS parameters defining the quality of service, which parameters include e.g. delay, BER (Bit Error Rate), maximum bit rate and order of service. Thus the requested and negotiated QoS parameters of one PDP context form one QoS profile." *Col. 1, lines 50-55.* Rinne also teaches that a PDP context is defined to each of the data flows of an application. *Col. 2, lines 55-57.* It is clear from Rinne that a QoS profile is the QoS parameters for a PDP context, and each PDP context corresponds to a specific application, and not to a mobile station, as claimed.

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Morover, the QoS profile is not received, as required by the claims. Rinne teaches that the Quality Management & Optimization Control (OMOC) receives or retrieves the definitions pertaining to the application and on that basis "realizes" the PDP context of the mobile station. *Col. 4, lines 24-29.* The OMOC may also receive "QoS data" that it then "converts" to a QoS profile of the UMTS system. *Col. 4, lines 33-38.*

Rinne clearly does not teach the limitation of Claim 1 requiring receiving a quality-of-service profile corresponding to the mobile station, as the QoS profile described by Rinne is not taught or suggested to correspond to a mobile station and is not "received", as required. Similarly, Claims 8 and 15 require that a QoS controller receives the quality-of-service profile corresponding to the mobile station from an authorization server, and this is not taught or suggested by Rinne. The Examiner has conceded that this is not taught by Shanbhag, either. As neither Rinne nor Shanbhag teach or suggest these limitations, the rejections of all claims are legally and factually deficient.

The Examiner responds with a detailed discussion of Shanbhag, not Rinne, without showing that Shanbhag ever teaches a QoS profile, as claimed. Then, on page 6, of the final Office Action, the Examiner clearly concedes that Shanbhag does not "clearly mention" a quality-of-service profile corresponding to the mobile station, as claimed. This is correct. Shanbhag describes the assignment of radio priority based on a subscriber profile parameter which is associated with the subscriber at the wireless client. The subscriber profile is not "received", and cannot be the claimed quality-of-service profile. The "radio priority" is transmitted, but it is not taught to "correspond to a mobile station", so it cannot be the claimed quality of service profile.

The Examiner has simply failed to identify any quality-of-service profile, in any art of record,

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that is received, corresponds to a mobile station, and according to which the quality-of-service parameters are determined, as claimed.

In his thorough Advisory Action, the Examiner refers to Shanbhag's paragraph 0036, which discusses the "wireless content switch". This paragraph only highlights the distinction of the claims – rather than receiving an authorization message and quality-of-service profile corresponding to the mobile station, as claimed, this switch simply retrieves a "client quality of service 465c" from a record 465 in its own memory 455. No QoS profile is ever <u>received</u> by anything, as required by the claims:

> [0036] When a data packet is received at upstream port 450a for a wireless client 105, the identity of the recipient wireless client 105 and the type of service parameter are determined. The type of service parameter can be determined by examination of the TCP layer of the data packet. The identity of the wireless client 105 can be determined by examination of the destination IP address associated with the data packet and selecting the record 465 with a matching client IP address identifier 465b. The client quality of service 465c is then retrieved from the record 465. The quality of service 465c and the type of service parameter are then used to look up the corresponding radio priority from the radio priority table 490. The radio priority is then used to replace the radio priority in the data -packet. The wireless content switch 125 then transmits the data packet to the base station system 315.

As no are of record teaches or suggest this claim limitation, the rejections are legally and factually deficient.

Claim 1 also requires determining quality-of-service parameters according to the quality-of-service profile and the application information, wherein the mobile station thereafter communicates according to the quality-of-service parameters. This is not taught or suggested by the art of record.

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Shanbhag clearly teaches in paragraph 0023 that a radio priority is assigned based on both the subscriber's level of service and the application pursuant to which the data packet is transmitted, not based on a quality-of-service profile, as claimed. It is not assigned based on any quality-of-service profile received from anywhere, and particularly not from a quality-of-service profile received from an authorization server, as required by claims 8 and 15. Nor does Rinne teach or suggest these limitations, as described above. As neither Rinne nor Shanbhag teach or suggest these limitations, the rejections of all claims are legally and factually deficient.

CONCLUSION

As a result of the foregoing, the Applicant asserts that the claims in the Application are in condition for allowance over all art of record, and that the rejections are both factually and legally deficient, and respectfully requests this case be returned to the Examiner for allowance or, alternatively, further examination.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Munck Butrus Deposit Account No. 50-0208.

Respectfully submitted,

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